10, 93612 IAPZU PROC'G POMPTO 04 AUG 2006

English Translation of Amendments under PCT Article 34 filed on December 1, 2005

- 75 -

## 10/588612 AP20 Rec'd FGTATIO 04 AUG 2006

## CLAIMS:

1. (Amended) A linker compound for use in arrangement of sugar molecules on a supporter,

the linker compound having a structure represented by following general formula (1), where a, b, d, e are independently an integer of 0 to 6,

X has a structure serving as a multi-branched structure moiety including three or more hydrocarbon derivative chains, wherein the hydrocarbon derivative chains each include an aromatic amino group at an end thereof, and may or may not include a carbon-nitrogen bond in a main chain thereof, and

X has oligoethylene oxide therein when b is 0.

$$X \stackrel{O}{=} \stackrel{H_2}{=} \underbrace{\left(O - CH_2CH_2\right)_b} \underbrace{\left(H \stackrel{O}{\parallel} \right)_d} \underbrace{\left(H_2 \stackrel{H_2}{\parallel}\right)_d} \underbrace{\left(H_2 \stackrel{H_2}{\parallel}\right)_s}_{\cdots(1)}$$

2. The linker compound according to claim 1 of

a structure represented by following general formula (2), where n is an integer of 1 to 6, and

X has a structure serving as a multi-branched structure moiety including three or more hydrocarbon derivative chains, wherein the hydrocarbon derivative chains each include an aromatic amino group at an end thereof, and may or may not include a carbon-nitrogen bond in a main chain thereof. 4. The linker compound according to claim 1 or 2, where X has a structure represented by following general formula (4), wherein  $q^1$ ,  $q^2$ ,  $q^3$ ,  $r^1$ ,  $r^2$ ,  $r^3$ ,  $t^1$ ,  $t^2$ ,  $t^3$ ,  $u^1$ ,  $u^2$ , and  $u^3$  are independently an integer of 0 to 6.

- 5. A ligand conjugate including the linker compound according to any one of claims 1 through 4, wherein an aromatic amino group of the linker compound includes a sugar molecule introduced therein.
- 6. (Amended) A ligand conjugate for use in arrangement of sugar molecules on a supporter,

the linker complex having a structure represented by following general formula (5), where m<sup>1</sup>, m<sup>2</sup>, m<sup>3</sup>, m<sup>4</sup>, n, p<sup>1</sup>, and p<sup>2</sup> are independently an integer of 1 to 6, R' is hydrogen (H) or R, and

7. (Amended) A ligand conjugate for use in arrangement of sugar molecules on a supporter,

the ligand conjugate having a structure represented by following general formula (7), where a, b, d, e,  $q^1$ ,  $q^2$ ,  $q^3$ ,  $r^1$ ,  $r^2$ ,  $r^3$ ,  $t^1$ ,  $t^2$ ,  $t^3$ ,  $u^1$ ,  $u^2$ , and  $u^3$  are independently an integer of 0 to 6,  $t^1$ ,  $t^2$ , and  $t^3$  are not 0 when b is 0, b is not 0 when  $t^1$ ,  $t^2$ , and  $t^3$  are 0, R' is hydrogen (H) or R, and

$$R = N - R'$$

$$R =$$

12. A sugar molecule introducing method of arranging a sugar molecule on a surface of a supporter, comprising the step of:

causing a solution containing the ligand conjugate of any one of claims 5 through 7 to come into contact with a supporter including metal on a surface thereof.

- 13. A ligand carrier which comprises the ligand conjugate of any one of claims 5 through 7 immobilized on a supporter including metal on a surface thereof.
- 14. (New) A sensor chip for a surface plasmon resonance, including the ligand conjugate according to any one of claims 5 through 7 immobilized onto a surface thereof.